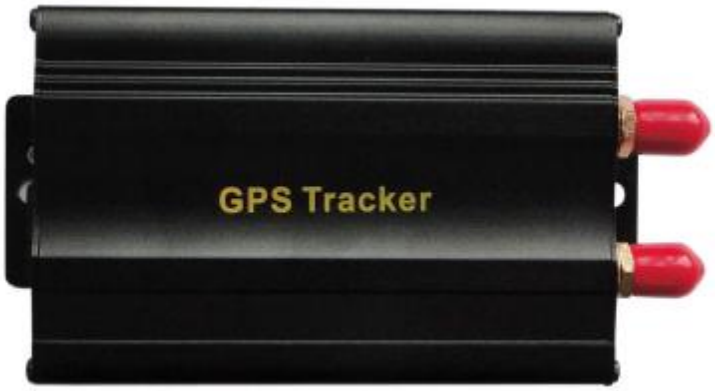
GPS103 User Manual of GSM/GPRS/GPS Tracker for Vehicle



Function introduction

The portable satellite positioning system is a new product,which Set multiple functions of security, positioning, monitoring surveillance, emergency alarms and tracking in its entirety. its compact size, easy to use, easy to operate, mainly used for location and tracking in vehicles and other mobile object

The product fully supports the functions of SMS / GPRS / Internet data transmission,to make it more widely used in large-scale monitoring, emergency scheduling, location-based services, traffic safety and many other areas of management.

Features

1、Support bothGPS / GSM station positioning ways.

2、Support SMS/GPRS/Internet Network data transfer (GPRS/Internet instructions in CD enclosed

3、Support GPRS on-line and the line re-connected automatically.

4、Support work based on existing GSM/GPRS network.

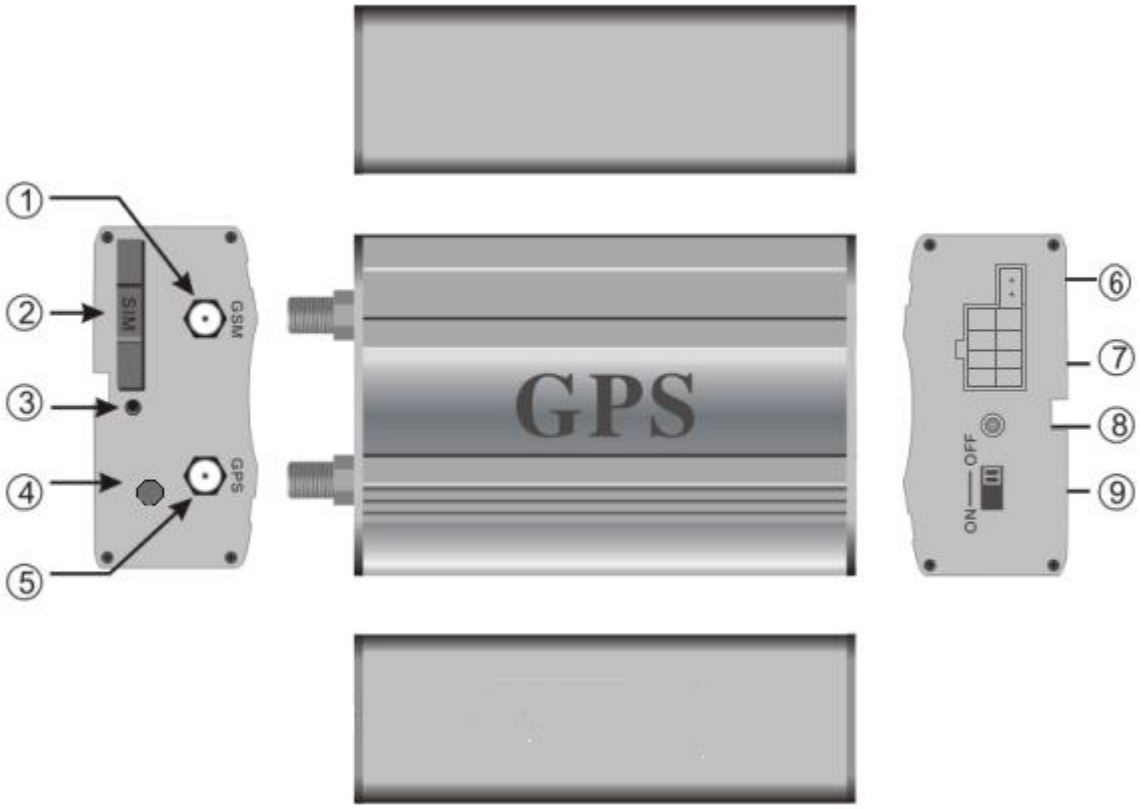
5、Support configuration by remote terminal.

6、Standby current is only 80mA.

7、Support for point-to-point, point to group,group-to-group monitoring.

8、Set multiple functions of security, positioning, monitoring surveillance, emergency alarms and tracking in its entirety.

Hardware description



1、GSM Antenna plug 2 、SIM card slot
3、SIM card slot 4 、monitor jack
5、GPS Antenna 6 、Sensor plug
7、outside cable 8 、power/GSM LED indicator
9、backup battery swich

NO.	PHOTOES	NAME	NOTE
1		Main Unit	7.5cm*5.4cm*2.5cm
2		GPS Antenna	5 meters long

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3		GSM Antenna	3 meters long
4		Harness	
4-1		Plug	6 PIN
4-2		Relay	
5		Manual	

4.Specification

content	specification
Dim.	**83*54*26mm**
Weight	**115g**
Network	**GSM/GPRS**
Band	**850/1800/1900Mhz or 900/1800/1900Mhz**
GPS chip	**SIRF3 chip**
GSM/GPRS	**Simcom300d or Simcom340d**
GPS sensitivity	**-159dBm**
GPS accuracy	**5m**
Time to first fix	**Cold status 45s** **Warm status 35s** **Hot status 1s**
Voltage of car power system	**12V input**
Car charger output	**Cut off the power and the oil sytem and control the power system： 0V**
Car power	**door 0V（Negative trigger）or 12V（positive trigger）**

input	**ACC:12V** **sensor：0V** **SOS botton ：0V**
Battery	**Chargeable changeable 3.7V 800mAh Li-ion battery**
Storage Temp.	**-40°C to +85°C**
Operation Temp.	**-20°C to +55°C**
Humidity	**5%--95% non-condensing**

Starting

1. : **Wiring of installation**

1、Insert the wiring harness with the allocation of products to the correct wiring holes..

2、To identify and cut off the car's fuel pump control circuit, the red wire connect with the engine side, yellow wire connect with the oil side.

3、Red and black wires, that is the product's power cords connect with the positive and negative of car power, the red connect with the positive of car power,and the black connect with the negative of car power.

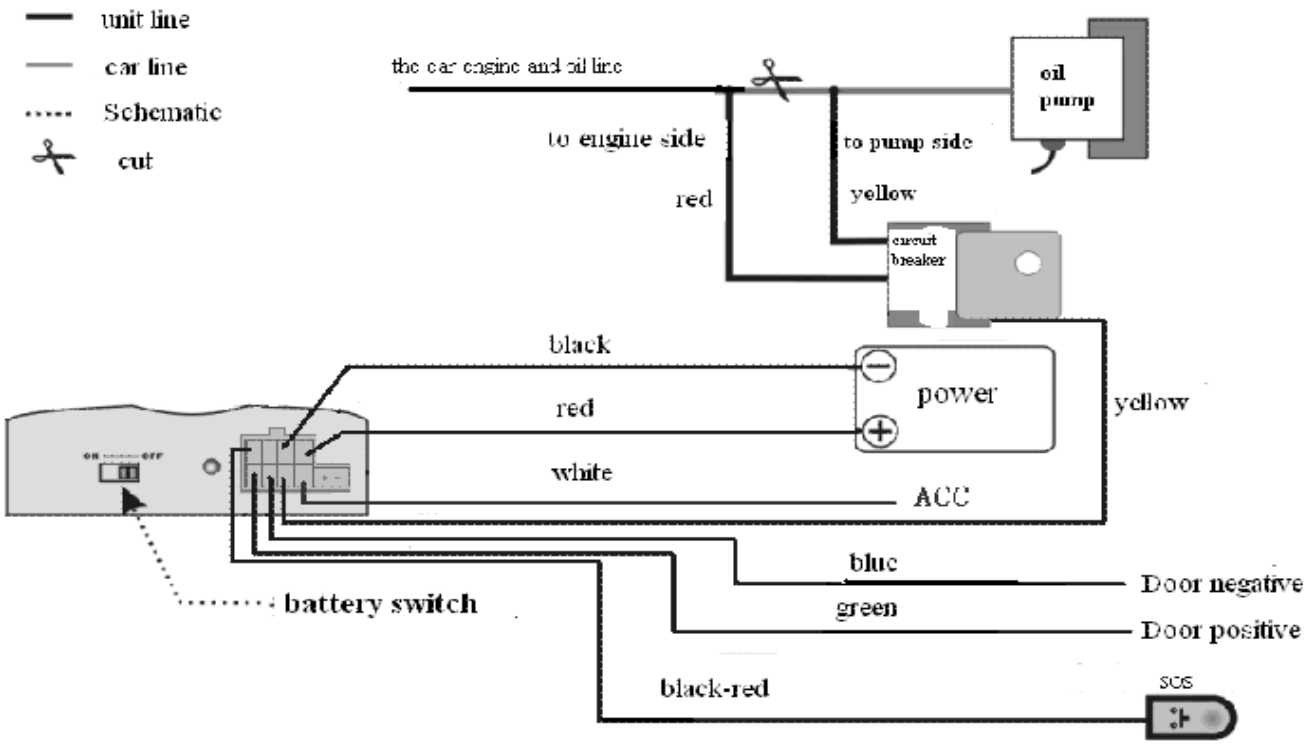
4、Red-black wire connect to the SOS button.

5、Knowing about the type of the door trigger is positive or negative trigger.and connect the right wires to the door control circuit.In this case,It will alarm when the door open in armed state.

6、As shown below,insert the sensor plug into the sensor slot

7、Connect GPS antenna connected to the GPS antenna terminal and connect the GSM antenna to GSM antenna plug.

8、Insert the external monitor mic into the monitor jack.



wiring of installation:

2: SIM card installation

Please make sure that the SIM card is able to execute the function of incoming calls display , no calls can be diverted and the PIN code is locked.

The SMS format must be TXT format,and can't recognize the PDU format.

Push the foil along and open it,put the SIM card into the holder,and turn the foil and fasten it in place.

3: Connecting with power to work

The Red and black power wires connect with the 12V car power system, and check out the GSM / GPS antenna is connected, swich the power on after the tracker deivice working.

At this time the green light indicator on, red indicator of GSM network start flashing,In 10 or 40 seconds,the unit will begin to work and acquire the GSM singals as well as the GPS singals.the GSM indicator will keep flashing every 3 seconds.

4: Initialization

Send SMS"begin+password" to the unit,it will reply"begin OK" and initialize all the settings（default password：123456）。

5: Change password

Send SMS password+old password+space+new password to the unit to change the password.

For example: send SMS"password123456 888888 to the unit. If succeeded,"password OK"will be replied to you cell phone via the tracker device.If failed.namely,the SMS "Password fail"is received,pls check out the format of the commands sent,and repeatly send.

Be sure to keep the new password in mind,you have to upload the software to restore the original setting in case

of losing the new password.

Attention:Make sure the new password is in 6 digits,or else the tracker can not recognize the password.

The "+" in the command,pls don't type "+",space means press the space keyboard on your cell phone.

6.Authorization

There are 5 numbers able to be authorized.

1.Call the tracker for 10 times,it will make the cell phone number as the authorized number automatically.

2.Send SMS "admin+password+space+cell phone number to set up an authorized number,the other authorized numbers should be set by the first authorized number,if the number is successfully authorized,the unit will reply"admin OK" in SMS.

3.Delete authorization ： send SMS " noadmin+password+space+authorized number to delete the authorized number.

4.If you track the target tracker deivce from another country,,you must add the country code beforoe thecell phone number,for example,send SMS admin123456 008613322221111" to the devicek.note: 13322221111 will be setted up as the authorized number.

7． Single Locating:

7.1 Any number call. The tracker device,it will reply a SMS about the position of lat.and long. If don't set up the authorized number. In existence of an authorized number, an unauthorized number dials up the tracker device,it won't reply a SMS about the position of lat.and long.

7.2 Dialing the tracker device through the authorized number,it will hang up your calling and respond to a real-time latitude and longitude information is as follows:

***Tracking location, the SMS information about the lat./long. Received is the place received the GPS singal when the GPS singal is weak.Pls check the time received the SMS if there are some errors of the location.**

8.successive locating automatically

8.1 Send SMS command "t030s005n+password" to the tracker device of vehicle terminal,it will report the Geo-info at 30s intervals for 5 times.(s:second, m:minute, h:hour).this setting must be in 3

digits and at maximum 255 in value.
8.2 Send SMS “t030s***n+password” to the tracker device of vehicle terminal,it will reply SMS heaps of times..
8.3 Cancellation: Send SMS “notn+password” to the tracker devicie of vehicle terminal to telete the “auto track”.
Note:the interval must not less than 20s..

9. Voice Surveillance

In this mode,the user can dial up the tracker device to monitor the voice(please refer to 10 for instruction).

10. Modes switch between “track” & ”monitor”

10.1 The default mode is“track”.
10.2 Send SMS command "monitor+password" to tracker device of vehicle termina, it will reply "monitor ok!" and swith to“monitor” mode.
10.3 Send SMS command "tracker+password" to tracker device of vehicle terminal, It will return "tracker ok!" and restore to“track” mode.

11。Alarm Function

11.1. Low battery alert
When the voltage of the car is near 3.7V,the tracker device will send SMS “low battery+lat./long information to the authorized number in 30m interval.

11.2. power off alert
When the power be cutted off or the voltage is 0V,the tracker device will send SMS “power alarm+lat./long. To the authorized number every in 3m interval.

11.3. SOS
Press the SOS botton,the tracker device will send SMS “help me!+lat./long. To all the authorized number in 3m interval.It will stop sending SMS“help me” when received a reply from any one of the authorized numbers.

11.4. Geo-fence
Set up a geo-fence for the tracker device to restrict its movements within a district.the unit will send SMS to the authorized numbers when it breaches the district.

Set up: When the unit stays immobile in a place for 3-10 minutes,the user can send SMS “stockade+password+space+latitude,longitude;latitude,longitude to unit to set the restricted district.in case of breach,it will send SMS“stockade!+geo-info” to the authorized numbers.

Remark: The first latitude & longitude is coordinate of the top left corner of the Geo-fence,while the second latitude & longitude is the coordinate of the bottom right corner,It will alarm in 3m interval.

Cancel: Send SMS“nostockade+password to deactivate this function.

11.5. Movement alert

Set up:when the unit stays immobile in a place for 3-10 minutes,the user can send SMS “move+password” to the tracker device.It will reply “move OK”.In case of such a movement(the default distance is 200m),it will send SMS “Move” along with a Geo-info to the authorized numbers,It will alarm in 3m interval.

Canclel: Send SMS“nomove+password to deactivate the movement alert.

11.6. Overspeed alert

Set up: Send SMS “speed+password+space+080 to the unit(suppose the speed is 80km/h),and it wil reply “speed OK!”.When the target moves exceeding 80km/h.the unit will send SMS “speed+080!+Geo-info” to the authorized numbers.It will alarm one time in 3m interval.

Cancel: Send SMS“nospeed+password to deactivate the overspeed alert.

Remark:It is recommended that the speed alarm is set at not less than 50km/h.For below that rate,it may cause the excursion of the GPS signal influenced by clounds etc.

12。 Cut off the oil and the power system / restore oil and power system

12.1.Cut off the oil and power system

Send SMS command “stop+password” to the tracker device,it will reply “Stop engine Succeed” to your cell phone visa the tracker device,and stop your car engine as well, at the same time.it will remain the immobile state until receiving the next SMS command of resuming the oil and power once receiving SMS command to cut off the oil and power system.

12.2.Resume the oil and power system

Send SMS command“resume+password’ to the unit,It will reply“Resume engine Succeed’ and resume

Your car engine as well, at the same time.It will remain this state until receiving the next SMS command to cut off the oil and power system once receiing SMS command to resume.the oil and gas system

13 .The following alarms information will be triggered in armed state.

13.1 arm

Send SMS command “arm+password” to the tracker device in the vehicle.It will reply “Tracker is activated”in both armed and disarmed state,and the SMS command will make the tracker device enter into armed state if the unit currently disarmed.

User must stop the engine, (that is ACC is lower volatge).Sending SMS “arm+password” when close the door and left.You will set up arm status fail if the engine is turned on (the ACC is high voltage),it will reply ”set up fail!pls turn off ACC’

13.2 Set up the type of the door trigger.

Know about the type of the door trigger is positive trigger or negative trigger.

Send SMS command“door++password” to the tracker device in the vehicle,

For example,send SMS command“door+123456” to the trackker device in vehicle.

It will reply “set up door+ mode ok ” and set up the door in positive trigger as well.At this time,you need to connect the green wire to the door trigger port in order to activate door alarm.

Send SMS command“door-+password’ to the tracker device vehicle,

for example: send SMS command"door-123456" to the tracker device in vehicle,
It will reply "set up door – mode ok" and set up the door in negative trigger as well.At this time,you need to connect the blue wire to the door trigger port in order to activate door alarm.

13.3 door alarm
The unit will send SMS "Door alarm+lat/long" to the authorized number in 3m interval.when the car is open in arm status.

13.4 Sensor alarm
The unit will send SMS "Sensor alarm+lat/long" to the authorized number in 3m interval.when the sensor is triggered in arm status.

13.5 ACC alarm
The unit will send SMS "Door alarm+lat/long" to the authorized number in 3m interval.when the engine of the car is turned on,that is the key is rotated to ACC.ON position,the car is running when in arm state.

13.6 disarm
Send SMS command "disarm + password" to the tracker device in the vehicle, It will reply "Tracker is deactivated"in both armed and disarmed state,and the SMS command will make the tracker device enter into disarmed state if the unit currently armed.
It won't alarm if the door is open and sensor is vibrated and the engine is started when deactivated this arm function.

14。 Check the vehicle state.
Send SMS command "check+password" to the trackekr device in the vehiclet,It will reply the status of the power,battery,GPS,ACC,door,GSM singal to the authorized number.
For example:Send SMS"check123456" to the tracker device in the vehicle,It will reply following information. the command.
Power: ON
Battery: HIGH
GPS: OK
ACC: Off
Door: Off
GSM Signal: Normal
If the wrong password,it will receive the SMS"user,password fail!

15: IMEI checking
Send SMS command "imei+password" to the unit.eg.: Send SMS command "imei123456" to the unit,a imei number in 15 digits will be returned to your cell phone.

16 Time setting
Send SMS command"time+space+zone123456+space+time" to the unit,If succeed,It will reply"time OK"
For example: Send SMS "time zone123456 8",8 is Chinese time zone,If your country time zone is minus.send SMS "time zone123456 -8".

5.17 GPRS setting
User must send SMS visa cell phone or software to set up IP,port and APN before starting GPRS.
17.1 Setting up APN
17.1.1 APN standards for Access Point Name and differs from country to country. For more information about the local APN, inquire with your local GPRS network operator.
17.1.2 Text the tracker a SMS "APN123456 + Space + your local APN " via a cell phone and if succeeded in setup, the tracker will return the message"APN OK".
17.1.3 eg. Send SMS command "APN123456 CMNET". If succeeded, "APN OK" is returned by the tracker in SMS.
Notes: 123456 refers to password and CMNET APN's Network Operator of China.

17.2 GPRS and User ID and password Setup
17.2.1 In most countries,the user name and password involving GPRS login are not compulsorily necessary,therefore,the entry can be skipped.For those countries requiring user name and password,pls configure as following:
17.2.2 Send SMS "up+123456+space+user+space+password"If succeeded, "user,password ok" is returned by the tracker in SMS.
17.2.3 For instance,send SMS "up123456 jonnes 666666 " to the tracker,and if succeeded,the tracker returns "user,password OK"
17.3 IP and port setup
17.3.1. Send SMS as below via a cell phone: adminip + 123456 + Space + IP Address + Space + Port Number. If succeeded, "adminip OK" is returned by the device in SMS.
17.3.2 eg,Send SMS command "adminip123456 202.105.135.50 9000 " to the tracker device, If succeeded, "adminip OK " is returned by the device in SMS.(123456 is default password ， 202.105.135.50 is IP， 9000 is port).

18 Modes switch between "SMS" and "GPRS"
18.1 The default mode is "SMS"
18.2 Send SMS "GPRS+password" to the unit, and it will reply "GPRS ok! " and switch to "GPRS"mode.
18.3 Send SMS "SMS+password" to the unit, it will reply"SMS ok!" and restore to "SMS" mode.

19. Cautions

Please comply with the instructions to extend the unit life:

1. Keep the unit dry. Any liquid, i.e. rain, moisture, may destroy or damage the inside circuitry.
2. Don't use & store the unit in dusty places.
3. Don't put the unit in overheated or overcooled places.
4. Handle carefully. Don't vibrate or shake it violently.
5. Clear the unit with a piece of dry cloth. Don't clean in chemicals, detergent.
6. Don't paint the unit, this may cause some foreign materials left in between the parts.
7. Don't disassemble or refit the unit.
8. Please read the user manual carefully before installation and operation,learn something more

about the the voltage range.otherwise,it won't work properly or distroy the product.

20. Faults & The solutions

Faults	Solution
Startup Fail	Please check out the power wiring in correct place.
Call Fail	Check the GSM antenna connected. Chec k whether the SIM card in place. Check whether the normal power supply voltag.
Hangup Fail	In existence of an authorized number, an unauthorized number dials up the unit. Please initialize the unit and re-set up the authorized numbers.
Monitor Fail	Check if the authorized number is setup
Location report in digits of zeros.	Check out if the GPS external antenna well.

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